RAW SEQUENCE LISTING

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89 90 91 92 93 94 95 96 97 98 99 100 101 102 103	tegetgegee geggeagaa egeggeagat getgggegtg catggaegag ggtecaegtg gagtgttaga gtttgatgaa aaaggttaaa ccagetgaat tgeageaaat atacgatgtg agacaagaae tteetggeaet tteaageagg gtggtttteg tgatgataaa ccgatgat	ggtcggacct gaggttgccg gtggcctgc tcgaagctag aggtggcgc gccgtgggcg gaggtgcatc aagctactca cctttttga gactcacagc gaagatggcc cactggttc gaagtcaaat gtcaacagca gaagtcgca ggaaaacat ggaaagtggca taccgatatc gaagtggca tgcagggcg	tggccgccac agctcgctgg cgggcccgag ggcggggccc acctgaagca agcgcggcag acagacataa ccagaaatgt ccatcgattt ccagcagtga tacctgcagc ccctgtgtaa ggcaattaat agctggtaa tgtcgtgct	cgcccctgg gcgcgccgg cgcttccggg gcgggctgag tggttgggtc ggcgcttccc cagcactgca tattgtgttt gcagtctgtg gagtgcatgc aaatctggag tgaattccat ccgattatgtg tgaattccat ccgattatgtg ctgaaccgg agcgttagcc caagatgttt gattgatgag caagatgttt caagatgag	aaacggggcg tcaggaggtg gcagcggctg gcagcggctg cccactgctc tgtgtggccg aagaaagaag ggtgattaca tctattattg actgttgcac gaagagacag gggctttggg atgacaactt gtggggcg cagaaattga cagaagattc ggtggagagtc	aggcggggcc gtgcgctcg tggcggcgac tcgggggcgc agtcgccaac acataaacct catggactga acacagaatt ttcacatttt aaaacataat acagcttggt tactgtttc catggactg ttcacggtcc cattagact tcacaggtcc tcattttcaa tcacagattgt	180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020 1080 1140 1200
89 90 91 92 93 94 95 96 97 98 99 100 101 102 103	tegetgegee geggeaggaa egeggeaggat getgggegtg catggaegag ggtecaegtg gagtgttaga gtttgatgaa aaaggttaaa ccagetgaat tgeageaaat atacgatgtg agacaagaae tcetggeaet tgeageaet tgeageaet cteageage gtgtttee tgatgataaa ccgaaatgee ctgatgataaa	ggtcggacct gaggttgccg gtggcctgc tcgaagctag aggtggcgc gccgtgggcg gaggtgcatc aagctactca cctttttga gactcacagc gaagatggcc cactggttc gaagtcaaat gaaaacagca gtaacagca gaagatggca ttgcaggtgca taccgatatc gaaagtggca taccgatatc gaaagtggca taccgatatc gaaagtggca tacagggcggaattgacaga	tggccgccac agctcgctgg cgggcccgag ggcggggccc acctgaagca agcgcggcag acagacataa ccagaaatgt ccatcgattt ccagcagtga tacctgcagc ccctgtgtaa gccaattaat agctggtaa tgttcgtgct gcaccgagca	cgcccctgg gcgcgccgg cgcttccggg gcgggctgag tggttgggtc ggcgcttccc cagcactgca tattgtgttt gcagtctgtg gagtgcatgc aaatctggag tgaattccat ccgattatgtg tgaattccat ccgattatgtg agcgttagcc cagaatgttt gattgatgag tgaattaaac ctaagatgttt gattgatgag ttccaatgtt	aaacggggcg tcaggaggtg gcagcggctg cccactgctc tgtgtggccg aagaaagaag ggtgattaca tctattattg actgttgcac gaagagacag gggctttggg atgacaactt ggtggtgctgc cagaaattga cagaagatca ggtgagagagtc gtggagagagc	aggcggggcc gtgcgcctcg tggcggcgc tcgggggcgc agtcgccaac acataaacct catggactga acacagaatt ttcacatttt aaaacataat acagcttggt tactgtttc tcacggtcc cattagact ttcacagtcc tcatgtttc	180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020 1080 1140





RAW SEQUENCE LISTING

DATE: 06/30/2005 PATENT APPLICATION: US/10/540,311 TIME: 08:46:14

Input Set : A:\689290-248.txt

110 111 112	gtgtcagatc cttcattgaa cgagggcctc	atataccctc aacaacgtgt agcggccggg	tcttcaaaat gccagcagct caaaattgag tcctgagaaa	gctgaccctc ccttcttttg actcccttt	cgagagctag aatgacattt ctggctcatg	agatgattgg caaggaagag cgctgtatgt	1380 1440 1500 1560
			tagaggggtt				1620
			agcttgcagc cacaaccgaa				1680
			aacccggtat				1740 1800
			ataacgttat				1860
			gttactggtc				1920
119	tctcacaqta	aaataaatat	aattaatggt	ttqcatqtqa	aattcacttt	tgaaagaaca	1980
120	tgttacctta	ccttttgttt	tagaagtttt	caagtattaa	aatattttt	agaa	2034
	<210> SEQ		5 5	J		5	
124	<211> LENG	TH: 1908					
	<212> TYPE						
		NISM: Artif:	icial				
	<220> FEAT						
		R INFORMATIO	ON: CDNA				
	<400> SEQU						
132	catagagaga	tettgeecat	ggcggcgccg	gcggcgggcc	cgaggcgggg	gctgggaaca	60
133	gerggeaeee	ggtcggacct	tggccgccac	cgccccctgg	ccctggctgg	ccgcccgcgc	120
125	acadaaaaaa	gaggergeeg	agctcgctgg	geegeegg	aaacggggcg	aggeggggee	180
			cgggcccgag				240
137	actagacata	aggtagagag	ggcggggccc	teatteasta	geageggerg	tagagagagag	300 360
138	catogacgag	accatagaca	acctgaagca	aggattag	tatatagaga	regggggege	420
			agcgcggcag				480
			acagacataa				540
			ccagaaatgt				600
			ccatcgattt				660
143	ccagctgaat	gaagatggcc	ccagcagtga	aaatctqqaq	gaagagacag	aaaacataat	720
144	tgcagcaaat	cactgggttc	tacctgcagc	tqaattccat	qaactttaaa	acagettggt	780
145	atacgatgtg	gaagtcaaat	cccatctcct	cgattatgtg	atgacaactt	tactgttttc	840
146	agacaagaac	gtcaacagca	acctcatcac	gccccaccg	tcaccataga	ggggttcctc	900
147	caggccctgt	ctctggcagt	ggacaagcag	tttgaagaga	gaaagaagct	tgcagcttac	960
148	atctgatcct	gggcttcccc	atctggtgct	tttcccatgg	agaacacaca	accagtaagt	1020
149	gaggttgccc	cacacagccg	tctcccaggg	aatcccttct	gcaaaccaaa	cgttacttag	1080
150	actgcaagct	agaaagccac	caaggccagg	ctttgttaaa	agaagtgtat	tctatttatg	1140
151	ttgttttaaa	atgcatactg	agagacaaac	atcttgtcat	tttcactgtt	tgtaaaagat.	1200
152	aattcagatt	gtttgtctcc	ttgtgaagaa	ccatcgaaac	ctgtttgttc	ccagcccacc	1260
153	cccagtggat	gggatgcata	atgccagcaa	gttttgttta	acagcaaaaa	aggaagatta	1320
154	atgcaggtgt	tatagaagcc	agaagagaaa	ctgtgtcacc	ctaaagaagc	atataatcat	1380
155	agcattaaaa	atgcacacat	tactccaggt	ggaaggtggc	aattgctttc	tgatatcagc	1440
156	tcgtttgatt	tagtgcaaaa	atgttttcaa	gactatttaa	tggatgtaaa	aaagcctatt	1500
15/	ccacattat	accaactgag	aaaaaaatgg	tcggtaaagt	gttctttcat	aataaataat	1560
150	tagacatggt	cccatttgca	ggaaaagtgc	agactctgag	tgttccaggg	aaacacatgc	1620
150	cygacatece	trgtaacccg	gtatgggcgc	ccctgcattg	ctgggatgtt	tctgcccacg	1680
161	guillightig	cgcaataacg	ttatcacatt	tctaatgagg	attcacatta	atataatata	1740
TOT	aaataaatag	gccagttact	ggtctctttc	tccgaatgtt	argttttgct	tttatctcac	1800





DATE: 06/30/2005

TIME: 08:46:14

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/540,311

Input Set : A:\689290-248.txt

163		atataattaa gttttagaag ID NO: 4				aacatgttac	1860 1908		
	<211> LENG'								
	<212> TYPE								
	<pre><213> ORGANISM: Artificial</pre>								
	<220> FEAT								
172	<223> OTHE	R INFORMATIO	ON: cDNA						
	<400> SEQUI								
175	ttcttgtgct	tcttgcccat	ggcggcgccg	gcggcgggcc	cgaggcgggg	gctgggaaca	60		
176	gctggcaccc	ggtcggacct	tggccgccac	cgcccctgg	ccctggctgg	ccgcccgcgc	120		
177	tcgctgcgcc	gaggttgccg	agctcgctgg	gccgcgccgg	aaacggggcg	aggcggggcc	180		
		gtggccctgc					240		
179	cgcggcagat	tcgaagctag	ggcggggccc	gcgggctgag	gcagcggctg	tggcggcgac	300		
		aggtggcggc					360		
		gccgtgggcg					420		
		gaggtgcatc					480		
		aagctactca					540		
		ccttttttga					600		
		gactcacagc					660		
		gaagatggcc					720		
		tcaaatccca					780		
		acagcaacct					840		
189	ggcactggaa	aaacatccct	gtgtaaagcg	ttagcccaga	aattgacaat	tagactttca	900		
		gatatggcca					960		
		gtggcaagct					1020		
192	gataaagacg	ccctggtgtt	cgtgctgatt	gatgaggtgg	agagtctcac	agccgcccga	1080		
193	aatgcctgca	gggcgggcac	cgagccatca	gatgccatcc	gcgtggtcaa	tgctgtcttg	1140		
		atcagattaa					1200		
		tcgacgtggc					1260		
		cagccatctt					1320		
		accctcgcca					1380		
		acgtgtcaaa					1440		
		gccgggtcct					1500		
200	geeeeeaeeg	tcaccataga	ggggtteete	caggecetgt	ctctggcagt	ggacaagcag	1560		
		gaaagaagct					1620		
202	antagettet	agaacacaca	accagtaagt	gaggttgeee	cacacageeg	teteceaggg	1680		
203	aatecettet	gcaaaccaaa	tatatttata	actgcaagct	agaaagccac	caaggccagg	1740		
205	atetteteat	agaagtgtat	tetaccate	anttanant	atgeatactg	agagacaaac	1800		
205	ccatccaaaac	tttcactgtt	casaaaaaaa	aactcagact	greegeeee	ttgtgaagaa	1860		
207	atttattta	ctgtttgttc acagcaaaaa	aggacatta	cccagiggat	gggatgcata	atgecageaa	1920		
		ctaaagaagc					1980		
209	agaagataga	aattoottto	tastatasaa	tagtttaata	tagtagaaaa	atatttaaa	2040		
210	gactatttaa	aattgctttc tggatgtaaa	aaaaaattatt	totacattat	agragetese	acycetecaa	2100 2160		
211	tcaataaaat	gttctttcat	aataaataat	gagagatget	accaactyag	aaaaaaatyg	2220		
		tgttccaggg					2220		
213	ccctacatta	ctgggatgtt	tetaccasac	atttattta	tocaataac	ttatcacatt	2340		
214	tctaatcacc	attcacatta	atataatata	aaataaataa	atcaattact	agt at at t	2340		
	uu c g u g g	accoucated	ululualala	uuucaaacay	gecagecace	ggiccicitio	2400		





RAW SEQUENCE LISTING DATE: 06/30/2005 PATENT APPLICATION: US/10/540,311 TIME: 08:46:14

Input Set : A:\689290-248.txt

215	taggaatatt	3+a+++aa+	+++-+-+		.+.++		0.460
	tccgaatgtt						2460
	gtgaaattca		aacatgttac	CTTACCTTT	gttttagaag	ttttcaagta	2520
	' ttaaaatatt	-					2538
	<210> SEQ 1						
	<211> LENG						
	<212> TYPE:						
	<213> ORGAN		icial				
	<220> FEATU						
	<223> OTHER		ON: CDNA			•	
	<400> SEQUE						
229	ctgtgctgct	ccctggagtg	gggggaactc	agcggcgggg	ccagaccttc	acagaccctc	60
230	cttatgtcca	cggagggtgg	attgaggtca	gcactgcaaa	gaaagaagac	ataaacctga	120
231	gtgttagaaa	gctactcaac	agacataata	ttgtgtttgg	tgattacaca	tggactgagt	180
	ttgatgaacc						240
	aggttaaaga						300
	agctgaatga						360
235	cagcaaatca	ctgggttcta	cctgcagctg	aattccatgg	gctttgggac	agcttggtat	420
236	acgatgtgga	agtcaaatcc	catctcctcg	attatgtgat	gacaacttta	ctgttttcag	480
	acaagaacgt						540
238	ctggcactgg	aaaaacatcc	ctgtgtaaag	cgttagccca	gaaattgaca	attagacttt	600
	caagcaggta						660
	ggttttcgga						720
	atgataaaga						780
	gaaatgcctg						840
	tgacccaaat						900
	tcaccgagaa						960
	caccctctgc						1020
	gtcagatcat						1080
247	tcattgaaaa	caacqtqtca	aaattgagcc	ttcttttgaa	tgacatttca	aggaagagg	1140
248	agggcctcag	caaccaaatc	ctgagaaaac	teceettet	ggctcatgcg	ctgtatgtcc	1200
249	aggcccccac	cgtcaccata	gagggttcc	tccaggccct	gtctctggca	atagacaaac	1260
	agtttgaaga						1320
251	cttttcccat	ggagaacaca	caaccagtaa	ataaaattac	cccacacacc	catctcccaa	1380
252	ggaatccctt	ctgcaaacca	aacottactt	agactgcaag	ctacaeacc	accaacccag	1440
253	ggctttgtta	aaagaagtgt	attctattta	tattatttta	asatggatag	tanananan	1500
254	acatcttgtc	attttcactq	tttgtaaaag	ataattcaca	ttatttatat	agttatassa	1560
255	aaccatcgaa	acctatttat	tcccaccca	acaacccaga	atagastaas	taatgggaag	1620
256	aagttttgtt	taacaccaaa	aaaggagaa	taatggagg	attotogoa	agagagaga	1680
257	aactgtgtca	ccctaaacaa	aaayyaayac	ataggatta	gitatagaag	ccagaagaga	1740
258	ataasaata	ggaattggtt	totostatos	acagcactaa	adatgcacac	attactccag	
250	gtggaaggtg	aataaatata	accigatatea	getegettga	tttagtgcaa	aaatgttttc	1800
255	aagactattt	atchtatta	addadgeeta	atacasas	ataccaactg	agaaaaaaat	1860
260	ggtcggtaaa	gratterice	ataataaata	accagacatg	gtcccatttg	caggaaaagt	1920
267	gcagactctg	agrantaceag	yyaaacacat	gctggacatc	ccttgtaacc	cggtatgggc	1980
202	gcccctgcat	rgcrgggarg	teretgecea	eggttttgtt	tgtgcaataa	cgttatcaca	2040
203	tttctaatga	ggattcacat	taatataata	taaaataaat	aggtcagtta	ctggtctctt	2100
264	tctccgaatg	ttatgttttg	cttttatctc	acagtaaaat	aaatataatt	aatggtttgc	2160
265	atgtgaaatt	cacttttgaa	agaacatgtt	accttacctt	ttgttttaga	agttttcaag	2220
	tattaaaata						2240
269	<210> SEQ I	.ט אט: 6					



RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/540,311

DATE: 06/30/2005 TIME: 08:46:15

Input Set : A:\689290-248.txt

Output Set: N:\CRF4\06302005\J540311.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11





VERIFICATION SUMMARY

PATENT APPLICATION: US/10/540,311

DATE: 06/30/2005 TIME: 08:46:15

Input Set : A:\689290-248.txt

Output Set: N:\CRF4\06302005\J540311.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date